From: Nathan Schumaker/COR/USEPA/US
To: Brendan_White@fws.gov
Cc: Brian_Woodbridge@fws.gov, Jim_Thrailkill@fws.gov, Jeffrey.Dunk@humboldt.edu, Nathan Schumaker/COR/USEPA/US@EPA

Date: Wednesday, April 28, 2010 04:49PM
Subject: Re: Selected meeting notes from Friday's MAG meeting

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Brendan,

Here's some feedback (attached). Not a lot of changes/additions.
But I think adding more would go beyond the conversations that took place -- at least the ones I was listening in on...
That said, I may have forgotten some details.

Nathan

-----Brendan_White@fws.gov wrote: -----

> To: Brian_Woodbridge@fws.gov, Jim_Thrailkill@fws.gov, Jeffrey.Dunk@humboldt.edu, Nathan Schumaker/COR/USEPA/US@EPA
> From: Brendan_White@fws.gov
> Date: 04/28/2010 04:24PM
> Subject: Selected meeting notes from Friday's MAG meeting
>
> Hi Gents -
>
> I need some assistance. Attached is the agenda for the MAG meeting with some selected notes on items I need to either be sure I captured correctly or need help understanding. Wondering if you could take a quick look at what I have in Track Changes and see if you can confirm what I heard or assist with my understanding of the meeting. I would sure appreciate it. Of paramount importance is the reasoning of the MAG to recommend not incorporating BLM's ingrowth model (down at the bottom - BLM would like a better explanation than I was able to provide). Not only did I miss some of that discussion (due to a call I had to take to deal with my children's after school care), but not being a modeler and I don't fully understand some of the rationale provided. Thanks.
>
> (See attached file: MAGAgendaWNotes.doc)
>
> Brendan White
> U.S. Fish and Wildlife Service
> Oregon State Office
> (503)231-6179

[attachment "MAGAgendaWNotes.doc" removed by Nathan Schumaker/COR/USEPA/US]

Modeling Advisory Group (MAG) Meeting
April 23rd, 2009
Medford BLM, Josephine Conference Room
3040 Biddle Road, (541) 618-2200

Please don't park in the "visitor" parking area and bring an ID (Gov. ID can be used instead of an office ID tag).

Purpose: To update the MAG on the spotted owl modeling progress to date and to discuss upcoming steps with the express intent of receiving input into our decision-making process.

9am – Welcome, introductions; *Brendan White*

9:15 – MaxEnt Results from NSO Recovery Plan modeling process; *Brian Woodbridge, Jeff Dunk*
Model development, Example models, Modeling regions, Output maps

10:00 – MaxEnt Results from Forest Plan Monitoring process; *Ray Davis, Katie Dugger*
Modeling process, output maps, habitat definitions

What is the cross-walk, if any, between these two efforts/products?

10:45 – Zonation modeling update; *Brian Woodbridge, Jeff Dunk*
Where are we in the process, what decisions need to be made, what are the next steps, are there issues/decisions the MAG needs to discuss?
What are the likely alternatives run in Zonation?

With and w/out Federal lands
With and w/out parks/wild.
Public lands (incl. state)
LSRs/CW
FS CW/LSRs, but no BLM lands (O&C?); or w/ WOPR LSMAs
Federal + HCPs
Exclude just tribal lands

Duane's Q – If pvt. land won't have habitat in future, don't we need MaxEnt layer w/o the influence of those adjacent lands? Don't recall full answer to this.

What existing conservation block networks should we test with Zonation, and how to test them?
Zonation parameterization

11:30 – Lunch (sandwich shop nearby, etc.)

12:30 – HexSim Modeling Process – Review of HexSim workshops and remaining questions; *Brendan White, Bruce Marcot, Nathan Schumaker*

Parameterizing HexSim:

Review of HexSim parameters identified for NSO modeling, and their suggested values (HexSim workshop results).

Which NSO parameters should be subjected to sensitivity testing? (Didn't answer) AGREE

How to translate continuous MaxEnt/Zonation data into habitat quality bins in HexSim? Hi, Med, Low? Etc. Continuous data into HexSim; hexes will take an average of the underlying pixels. AGREE

How to attribute the HexSim hexagons? Ideally, this would be done in Arc, and then imported to HexSim. But it can be done in HexSim too. A habitat map will be constructed by taking the mean, mode, etc of the values of every pixel falling within each hexagon. Other maps might be constructed so we can stratify resource use and/or vital rates by latitude or province, to capture dispersal cost through matrix habitats, etc.

How to best evaluate and represent the barred owl influence on spotted owls in Maxent and HexSim? Katie Dugger – We have good info on barred owl influence on occup., extinction rate, reproduction parameters. Can estimate the probability of being affected by a barred owl. Yes, this is part-I. This barred owl influence would be represented as a map, or a series of maps changing in time. Part-II would involve modeling the barred owls explicitly in HexSim.

We probably don't have the home range size right in the simulations yet. It should be 500 ha in the south, increasing to 2500-3500 ha in Washington. But there is a lot of overlap, so territory size should be quite a bit smaller (how much is TBD).

HexSim Results:

In addition to lambda trends, what HexSim end products we should be sure to produce (AOCs, sources/sinks, etc.)?
Est. pop. size in time
Proportion of replicates that go extinct (ext. probability)
Occupancy maps
Source-sink maps
Tables of observed vital rates stratified by trait class
Compare outputs with and without barred owls; if no diff. then how we represent BO influence is inconsequential

Defining the Reserve Design Scenarios to Run in HexSim:

In addition to the Zonation outputs, are there existing reserve designs should be included in the HexSim modeling (or should these all be included in the Zonation modeling?) Mostly all included (LSRs, etc.)

How to differentiate between the habitat value of the landscape inside and outside of the conservation network blocks (or else won't all HexSim results be the same based on using the same base map?) In other words, how to project reserve design scenarios into the future.

BLM presentation on potentially using WOPR outgrowth models range-wide to estimate possible future owl clusters – *Eric Greenquist*

The general consensus of the MAG was to NOT adopt Eric/BLM's in-growth model. Reasons provided included:

- BLM process would delay our process (it would take too long)
- Our process can already account for differences between reserves/non-reserves (albeit more simplistically than BLM proposes). In what ways is our method better? More credible? More repeatable? More established in published studies?
- WOPR in-growth data would best be applied after initial HexSim runs. I need this explained to me again; not sure how that works.

Instead, it was recommended that we would incrementally increase the values of the hexes in the .4 - .6 range to be .5 to .6 to demonstrate ingrowth.